

AMPLIFICATION OF GENE USING ARTIFICIAL TRANSPOSON

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[57] Abstract:

PROBLEM TO BE SOLVED: To amplify a desired gene on a chromosome by creating an artificial transposon having a medicine- resistant gene and a desired gene between both inverted repeats and capable of transferring in a specific bacterial cell and introducing the transposon into a cell and transferring the transposon onto the chromosome. SOLUTION: An artificial transposon having a structure inserting a desired gene comprising a gene which participates in biosynthesis of amino acid, e. g. drug-resistant gene such as a chloramphenicol-resistant gene or a tetracycline- resistant gene and an aspartokinase gene and/or a dihydropicolinic acid synthetase gene into inverted repeats derived from an insertion sequence of a coryneform bacterium and capable of transferring in the coryneform bacterium cell is created and the artificial transposon is introduced into the coryneform bacterium cell and transferred onto chromosome of the chromosome bacterium and a desired gene is introduced onto the chromosome and amplified to provide a coryneform bacterium used for industrial production of amino acid and nucleic acid.

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